DETAILED ACTION

Response to Amendment

0.1 Amendment filed on 09/06/2011 has been entered and noted by Examiner. Claims 10 and 23 are cancelled in the application, and claims 1-9, 11-22 and 24-28 are pending.

Specification

0.2 The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Documents Relied Upon

0.3 The following document numbers are cited:

0.4 D1 US 20010055841 A1

0.5 D2 JP 2003-058007 A

0.6 D3 US 20010025958 A1

0.7 D4 US 20010022497 A1

0.8 D5 US 20030143437 A1

Claim Rejections - 35 USC § 103

0.9 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.0 The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1.1 Claims 6, 7, 9, 11, 12, 13, 19, 20, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view of D2, D3 and D4.

1.2 Regarding claims 6 and 19, D1 discloses a light emitting display device comprising: a substrate (301) having an insulating surface, a gate electrode (339) formed over the substrate; a gate insulating layer (372) formed over the gate electrode; a semiconductor layer (304-307) and a first electrode (383) formed over the gate insulating layer; a wiring layer (382) formed over the semiconductor (Figure 4a); a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer. D1 does not appear to explicitly disclose (a) a conductive layer including a refractory metal over a substrate having an insulating surface and the gate electrode formed directly on the conductive layer, or (b) the wiring layer covers the edge portion of the first electrode. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

1.3 However, in the same field of active-matrix devices, D2 discloses forming gate electrodes on a substrate having a conductive layer including a refractory metal (Ti) by ink jet method to simplify the manufacturing of a TFT array (see at least paragraph 12). D2 does not disclose that the gate electrode is formed over and directly on the conductive layer (see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the conductive layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the conductive film.

1.4 Further, in the same field of active-matrix devices, D3 discloses a wiring layer (157) covering an edge portion (Figure 4A) of a first electrode (158) in order to connect to the first electrode (paragraph 119).

1.5 At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D3 to modify the device of D1 to include the conductive layer with a refractory metal of D2 in order to simplify TFT manufacturing and to cover an edge of the first electrode with the wiring as taught by D3 in order to connect the wiring to the electrode.

1.6 Regarding claims 7 and 20, D1 discloses a light emitting display device comprising: a substrate (301) having an insulating surface; a wiring layer (382) and a first electrode (383) formed over the substrate; a semiconductor layer (435) formed over the wiring layer; a gate insulating layer (372) formed over the semiconductor layer; a gate electrode (339) formed over the gate insulating layer; a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer. D1 does not explicitly appear to disclose (a) a substance conductive layer including a refractory metal over a substrate having an insulating surface, (b) the wiring layer covers the edge portion of the first electrode and both wiring layer and first electrode are formed over and in direct contact with the conductive layer, or (c) the top gate TFT/ reverse staggered TFT configuration. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

1.7 However, in the same field of active-matrix devices, D2 discloses forming wirings and first electrodes on a substrate having a conductive layer including a refractory metal (Ti) by ink jet method to simplify the manufacturing of a TFT array (see at least paragraph 12). D2 does not disclose that the wiring and first electrodes are formed over and directly on the conductive layer (see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the conductive layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the conductive film.

18. Further, in the same field of active-matrix devices, D3 discloses a wiring layer (157) covering an edge portion (Figure 4A) of a first electrode (158) in order to connect to the first electrode (paragraph 119) and a reverse staggered TFT configuration (paragraphs 234-237, Figure 24).

19. D4 teaches the equivalence of photocatalytic materials (¶ 53). It is obvious to one of ordinary skill in the art to use any one of the known photocatalytic materials as they are expected to function the same.

20. At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D4to modify the device of D1 to include the conductive layer with a refractory metal of D2 and D4 in order to simplify TFT manufacturing and to cover an edge of the first electrode with the wiring as taught by D3 in order to connect the wiring to the electrode. Further, the use of a reverse staggered TFT is a matter of design variation known in the art.

21. Regarding claims 9 and 22, D1 discloses a light emitting display device comprising: a substrate (301) having an insulating surface; a wiring layer (382) and a first electrode (383) formed over the substrate; a semiconductor layer (435) formed over the wiring layer; a gate insulating layer (372) formed over the semiconductor layer; a gate electrode (339) formed over the gate insulating layer; a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer, wherein the first electrode covers an edge portion of the wiring layer (Figure 4A). D1 does not explicitly appear to disclose (a) a substance conductive layer including a refractory metal over a substrate having an insulating surface, (b) the wiring layer covers the edge portion of the first electrode and both wiring layer and first electrode are formed over and in direct contact with the conductive layer, or (c) the top gate TFT/ reverse staggered TFT configuration. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

22. However, in the same field of active-matrix devices, D2 discloses forming wirings and first electrodes on a substrate having a conductive layer including a refractory metal (Ti) by ink jet method to simplify the manufacturing of a TFT array (see at least paragraph 12). D2 does not disclose that the wiring and first electrodes are formed over and directly on the conductive layer (see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the conductive layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the conductive film.

23. Further, in the same field of active-matrix devices, D3 teaches a reverse staggered TFT configuration (paragraphs 234-237, Figure 24).

24. D4 teaches the equivalence of photocatalytic materials (¶ 53). It is obvious to one of ordinary skill in the art to use any one of the known photocatalytic materials as they are expected to function the same.

25. At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D4 to modify the device of D1 to include the conductive layer with a refractory metal of D2 and D4 in order to simplify TFT manufacturing and the use of a reverse staggered TFT is a matter of design variation known in the art.

26. Regarding claims 11 and 24, the combination of D1-D4 discloses a light emitting display device according to any one of claims 6-9 and 19-22, wherein the gate electrode and the wiring layer are made of a material selected from the group consisting of silver, gold, copper, and indium tin oxide (D3, Cu, paragraph 145). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art to use a metal such as copper, gold, or ITO in order to reduce electrical resistance or form a transparent electrode. Further, these are all well-known electrode materials in the art.

27. Regarding claim 13, the combination of D1-D4 disclose a TV set including a display screen having the light emitting display device according to any one of claims 6-7 (D1, Figure 18A).

28. Regarding claims 12 and 25, the combination of D1-D4 disclose the light emitting display device according to any one of claims 6-9, wherein the semiconductor layer is a semi-amorphous semiconductor containing hydrogen and halogen and having a crystal structure (column 8, lines 31-46, D3). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D4 to modify the device of D1 and D2 to include the semiconductor layer comprising a semi-amorphous semiconductor containing hydrogen and halogen and having a crystal structure of D3 in order to improve TFT operation (column 8, D3).

29. Regarding claim 26, D1-D4 disclose A light emitting display device according to any one of claims 1 to 4, and 14 to 17, wherein the substance with the photocatalytic function contains an oxygen (D2, D4).

30. Claims 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view of D2.

31. Regarding claims 8 and 21, D1 discloses a light emitting display device comprising: a substrate (301) having an insulating surface, a gate electrode (339) formed over the substrate; a gate insulating layer (372) formed over the gate electrode; a semiconductor layer (435) and a first electrode (383) formed over the gate insulating layer; an insulating layer (308) covering an edge portion of the semiconductor layer (Figure 2b); a wiring layer (382) formed over the semiconductor layer and the insulating layer (Figure 4a); a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer, wherein the first electrode covers an edge portion of the wiring layer (Figure 4A). D1 does not appear to explicitly disclose (a) a conductive layer including a refractory metal over a substrate having an insulating surface, (b) or that the gate electrode is formed over and in direct contact with the conductive layer.

3.2 However, in the same field of active-matrix devices, D2 discloses forming gate electrodes on a substrate having a conductive layer including a refractory metal (Ti) by ink jet method to simplify the manufacturing of a TFT array (see at least paragraph 12). D2 does not disclose that the gate electrode is formed over and directly on the conductive layer(see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the conductive layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the conductive film.

3.3 At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D2 to modify the device of D1 to include the conductive layer with a refractory metal of D2 in order to simplify TFT manufacturing.

3.4 Claims 1, 2, 5, 10, 13, 14, 15, 18, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view D2, D3, D4 and D5.

3.5 Regarding claims 1 and 14, D1 discloses a light emitting display device comprising: a a base film (302), gate electrode (304-307) formed over a base film (302); a gate insulating layer (372) formed over the gate electrode; a semiconductor layer (435) and a first electrode (383) formed over the gate insulating layer (Figure 4A); a wiring layer (382) formed over the semiconductor layer (Figure 4A); a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode (Figure 4A); and a second electrode (386) over the electroluminescent layer (Figure 4A). D1 does not explicitly appear to disclose (a) a base film including substance having a photocatalytic function between the substrate and gate electrode and the gate electrode formed over and in direct contact with the base film, or (b) the wiring layer covers the edge portion of the first electrode. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

36. However, in the same field of active-matrix devices, D2 discloses forming gate electrodes (26) on a substrate having a photocatalytic surface (TiO2) by ink jet method to simplify the manufacturing of a TFT array (¶ 12, 26-27). D2 does not disclose that the gate electrode is over and directly on the base film (see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain (D4: Figure 24). These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the base layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film by a ink jet method without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the base film.

37. Further, in the same field of active-matrix devices, D3 discloses a wiring layer (157) covering an edge portion (Figure 4A) of a first electrode (158) in order to connect to the first electrode (paragraph 119). D4 further discloses a stagger inverted TFT (Figure 24) where the gate electrode is in direct contact with the base layer.

38. D4 teaches the equivalence of photocatalytic materials (¶ 53). It is obvious to one of ordinary skill in the art to use any one of the known photocatalytic materials as they are expected to function the same.

39. D5 teaches in ¶ 61 that oxygen defects in a TiO2 photocatalytic layer improve the photocatalytic properties of the layer.

40. At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D5 to modify the device of D1 to include the photocatalytic surface of D2 in order to simplify TFT manufacturing, to cover an edge of the first electrode with the wiring as taught by D3 in order to connect the wiring to the electrode, to use an inverted stagger TFT as taught by D3 in order to reduce manufacturing cost, to use anyone of the known photocatalytic materials as taught by D4, and to add oxygen defects to the photocatalytic layer to improve the photocatalytic properties as taught by D5.

41. Regarding claims 2 and 15, the D1 discloses a light emitting display device comprising: base film (302); a wiring layer (382) and a first electrode (383) formed over a substrate (301) having an insulating surface; a semiconductor layer (435) formed over the wiring layer; a gate insulating layer (372) formed over the semiconductor layer; a gate electrode (339) formed over the gate insulating layer; a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer. D1 does not explicitly appear to disclose (a) a base film including a substance having a photocatalytic function and the wiring layer and the first electrode formed over and in direct contact with the base film, (b) the wiring layer covers the edge portion of the first electrode, or (c) the top gate TFT/ reverse staggered TFT configuration.

42. However, in the same field of active-matrix devices, D2 discloses forming wiring layers (22 & 23) over and in direct contact with a substrate having a photocatalytic surface (TiO2) by ink jet method to simplify the manufacturing of a TFT array (¶ 12, 26-27). It is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrodes below the drain/source electrodes and directly on the base layer or vice-versa. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the base film.

43. Further, in the same field of active-matrix devices, D3 discloses a wiring layer (157) covering an edge portion (Figure 4A) of a first electrode (158) in order to connect to the first electrode (paragraph 119) and a reverse staggered TFT configuration (paragraphs 234-237, Figure 24).

44. D5 teaches in ¶ 61 that oxygen defects in a TiO_2 photocatalytic layer improve the photocatalytic properties of the layer.

45. D4 teaches the equivalence of photocatalytic materials (¶ 53). It is obvious to one of ordinary skill in the art to use any one of the known photocatalytic materials as they are expected to function the same.

46. At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D5 to modify the device of D1 to include the photocatalytic surface of D2 in order to simplify TFT manufacturing, to cover an edge of the first electrode with the wiring as taught by D3 in order to connect the wiring to the electrode and add oxygen defects to the photocatalytic layer to improve the photocatalytic properties.

47. Regarding claims 4 and 17, the D1 discloses a light emitting display device comprising: a wiring layer (382) and a first electrode (383) formed over a substrate (301) having an insulating surface; a semiconductor layer (435) formed over the wiring layer; a gate insulating layer (372) formed over the semiconductor layer; a gate electrode (339) formed over the gate insulating layer; a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode; and a second electrode (386) over the electroluminescent layer, wherein the first electrode covers an edge portion of the wiring layer (Figure 4A). D1 does not explicitly appear to disclose (a) a base film including a substance having a photocatalytic function and the wiring layer and first electrode formed over and directly on the base film, or (b) the top gate TFT/ reverse staggered TFT configuration. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

48. However, in the same field of active-matrix devices, D2 discloses forming a wiring and first electrode (23 & 24) directly on a substrate having a photocatalytic surface (TiO2) by ink jet method to simplify the manufacturing of a TFT array (¶ 12, 26-27). It is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the base layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the base film.

49. Further, in the same field of active-matrix devices, D3 discloses a reverse staggered TFT configuration (paragraphs 234-237, Figure 24).

50. D5 teaches in ¶ 61 that oxygen defects in a TiO_2 photocatalytic layer improve the photocatalytic properties of the layer.

5.1 D4 teaches the equivalence of photocatalytic materials (¶ 53). It is obvious to one of ordinary skill in the art to use any one of the known photocatalytic materials as they are expected to function the same.

5.2 At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D5 to modify the device of D1 to include the photocatalytic surface of D2 in order to simplify TFT manufacturing, add oxygen defects to the photocatalytic layer to improve the photocatalytic properties, and the use of a reverse staggered TFT is a matter of design variation known in the art.

5.3 Regarding claims 5 and 18, the combination of D1-D5 disclose a light emitting display device according to any one of claims 1-2 or 14-15, wherein the substance having a photocatalytic function comprises titanium oxide (D2, paragraph 12). The motivation to combine is given above.

5.4 Regarding claims 11 and 24, the combination of D1-D5 discloses a light emitting display device according to any one of claims 1-4 and 14-17, wherein the gate electrode and the wiring layer are made of a material selected from the group consisting of silver, gold, copper, and indium tin oxide (D3, Cu, paragraph 145). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art to use a metal such as copper, gold, or ITO in order to reduce electrical resistance or form a transparent electrode. Further, these are all well-known electrode materials in the art.

5.5 Regarding claim 13, the combination of D1-D5 disclose a TV set including a display screen having the light emitting display device according to any one of claims 1-2 (D1, Figure 18A).

5.6 Regarding claims 12 and 25, the combination of D1-D5 disclose the light emitting display device according to any one of claims 1-4, wherein the semiconductor layer is a semi-amorphous semiconductor containing hydrogen and halogen and having a crystal structure (column 8, lines 31-46, D3). At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D3 to modify the device of D1 and D2 to include the semiconductor layer comprising a semi-amorphous semiconductor containing hydrogen and halogen and having a crystal structure of D3 in order to improve TFT operation (column 8, D3).

57. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view of D2.

58. Regarding claims 3 and 16, D1 discloses a light emitting display device comprising: a base film (302); a gate electrode (339) formed over a substrate (301) having an insulating surface; a gate insulating layer (372) formed over the gate electrode; a semiconductor layer (435) and a first electrode (383) formed over the gate insulating layer (Figure 4A); an insulating layer (308) covering an edge portion of the semiconductor layer (Figure 2b); a wiring layer (382) formed over the semiconductor layer and the insulating layer(Figure 4A); a partition wall (384) covering an edge portion of the first electrode and the wiring layer; an electroluminescent layer (385) over the first electrode (Figure 4A); and a second electrode (386) over the electroluminescent layer (Figure 4A), wherein the first electrode covers an edge portion of the wiring layer (Figure 4A). D1 does not explicitly appear to disclose (a) a base film including a substance having a photocatalytic function formed on the substrate and (b) the gate electrode formed over and in direct contact with the base film. The use of droplet discharge method is well known in the semiconductor art, and would have been obvious at the time of the invention to one of ordinary skill in the art.

59. However, in the same field of active-matrix devices, D2 discloses forming gate electrodes (26) on a substrate having a photocatalytic surface (TiO2) by ink jet method to simplify the manufacturing of a TFT array (¶ 12, 26-27). D2 does not disclose that the gate electrode is over and directly on the base film (see fig 10). However, it is well known in the art that TFT's can be arranged with the gate above the source/drain or below the source/drain. These configurations are functionally equivalent. Therefore, it would have been obvious to one of ordinary skill in the art to place the gate electrode below the drain/source electrodes and directly on the base layer. D2 teaches that the use of the photocatalytic base layer enables the creation of the source and drain electrodes directly on the base film without the use of partitions (compare Figure 9 to Figure 10). The same benefit exists when forming the gate electrode directly on the base film.

60. At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of D1-D2 to modify the device of D1 to include the photocatalytic surface of D2 in order to simplify TFT.

61. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over D1 in view of D2, D3, D4 and D5.

6.2 Regarding claims 27-28, D1-D5 disclose a light emitting display device and method of manufacturing a light emitting display according to any one of claims 1, 3, 6, 8, 14, 16, 19 and 21 further comprising an insulating layer (D1: 308) covering an edge portion of the semiconductor layer (D1: 304-307) or the step of forming an insulating layer covering an edge portion of the semiconductor layer (D1: Figure 2b).

Response to Arguments

6.3 Applicant's arguments with respect to all of the claims have been considered but are moot in view of the new ground(s) of rejection.

6.4 Examiner has corrected patent number of the reference teaching that the wiring layer covers and edge portion of the first electrode and the inverted stagger TFT to US 2001/0025958 A1.

6.5 Further, US 2001/0022497 A1 teaches the equivalence of photocatalytic materials in ¶ 53.

Conclusion

6.6 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,593,691 B2 teaches that inverted stagger type TFTs are advantageous in reducing the manufacturing cost of TFTs (¶ 124-125 of the detailed descripition).

6.7 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6.8 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Britt Hanley whose telephone number is (571) 270-3042. The examiner can normally be reached on Monday - Thursday, 6:30a-5:00p ET.

69 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

70 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Britt Hanley/
Examiner, Art Unit 2889